

What is claimed is:

1. A feeding control method used for recording images by
relative feeding of a recording head and a recording
5 material in a first direction, said recording head having
an array of plural recording elements in said first
direction, said image being recorded on said recording
material by repeating feeding of said recording head in a
second direction perpendicular to said first direction, and
10 said relative feeding each time, said feeding control
method comprising the steps of:
determining a correction value in said relative feeding
on a random basis within a predetermined range; and
relatively feeding said recording head and said
15 recording material in said first direction with a
corrected feeding amount, which is obtained by adding said
correction value to a predetermined basic value.
2. A feeding control method as claimed in claim 1, further
20 comprising the steps of:
determining natural numbers n and m that satisfy $n \geq m$;
and
carrying out relative feeding for m times by said
corrected feeding amount in every n times of relative
25 feeding.
3. A feeding control method as claimed in claim 1, further
comprising the steps of:
determining a natural number $R1$ on a random basis; and
30 carrying out said relative feeding each time by said

corrected feeding amount in every R1 times of relative feeding.

4. A feeding control method as claimed in claim 1, wherein
5 a feeding mechanism carries out said relative feeding by feeding said recording material in said first direction each time, said correction value C1 is determined within the following range;

10 $|C1| < (p - k)/2$

wherein p is an interval between recording dots in said recording material in said first direction, and k is a range of unevenness caused by structural factors of said feeding
15 mechanism.

5. A feeding control method as claimed in claim 1, wherein said feeding mechanism carries out said relative feeding by feeding said recording material in said first direction
20 each time, said correction value C1 is determined within the following range;

$$|C1| < k$$

25 wherein k is a range of unevenness in feeding amount caused by said structural factors of said feeding mechanism.

6. A feeding control method as claimed in claim 1, wherein said feeding mechanism carries out said relative feeding
30 by feeding said recording materials in said first direction

each time, and said correction value C1 is determined in the following range;

$$|C1| < 15 \mu\text{m}$$

5

7. A feeding control method as claimed in claim 1, further comprising the steps of:

storing said correction value in a memory in each relative feeding; and

10 determining said corrected feeding amount for recording next image by using said correction value, which is read from said memory.

8. A printer for recording an image on a recording material, said printer comprising:

15

a recording head having an array of recording elements in a first direction;

a carriage for feeding said recording head in a second direction, which is perpendicular to said first direction;

20 a feeding mechanism for relatively feeding said recording materials and said recording head in said first direction; and

25 a controller for carrying out said relative feeding for a corrected feeding amount obtained by adding a corrected value, which is determined on a random basis within a predetermined range, to a predetermined basic value.

9. A printer as claimed in claim 8, wherein said controller carries out m times of relative feeding by said corrected feeding amount in every n times of relative feeding.

30

10. A printer as claimed in claim 8, wherein said controller
determines random number R1, and carries out said relative
feeding by said corrected feeding amount, once in every R1
5 times of relative feeding.

11. A printer as claimed in claim 8, further comprising a
feeding mechanism for feeding said recording material in
said first direction each time, said controller determining
10 said correction value C1 within the following range;

$$|C1| < (p - k)/2$$

wherein p is an interval between recording dots on said
15 recording materials, k is a range of unevenness in feeding
amount caused by structural factors in said feeding
mechanism.

12. A printer as claimed in claim 8, further comprising a
20 feeding mechanism for feeding said recording material in
said first direction each time, said controller determining
said correction value C1 within the following range;

$$|C1| < k$$

25

wherein k is a range of unevenness in feeding amount caused
by structural factors of said feeding mechanism.

13. A printer as claimed in claim 8, further comprising a
30 feeding mechanism for feeding said recording material in

said first direction each time, said controller determining
said correction value C1 within the following range;

$$|C1| < 15 \mu\text{m}$$

5

14. A printer as claimed in claim 8, further comprising a
memory for storing said correction value in each relative
feeding, said controller determining said corrected
feeding amount for recording next image by using said
10 correction value, which is read from said memory.

15

20

25

30